

REMARKS

The Examiner has restricted this application to one of the following inventions under 35 U.S.C. § 121:

- I. Claims 1-7 drawn to two species of thermistors, classified in class 338, subclasses 9 and 22R; and
- II. Claims 8-13 drawn to a method of making a thermistor, classified in class 29, subclass 612.

The Applicant elects Group II (claims 8-13) and cancels Group I (claims 1-7) without prejudice. The Applicant intends to file a divisional application for the claims not elected.

The Applicant has also amended the Title and Abstract to reflect the Applicant's election. Further, the Applicant has added new claim 14. The Applicant submits that new claim 14 is upon the elected species of Group II in that claim 14 is also drawn to a method of making a thermistor.

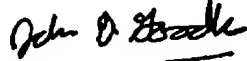
Favorable action is respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

The Examiner is respectfully invited to call the undersigned attorney at (515) 288-3667 to discuss the claims in an effort to reach a mutual agreement with respect to claim limitation in the present application if the Examiner has not found that all claims should be immediately allowed.

Respectfully submitted,



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Application No. P04803US0

**AMENDMENT — VERSION WITH MARKINGS
TO SHOW CHANGES MADE**

In the Title

METHOD FOR THIN FILM NTC THERMISTOR

In the Abstract

~~— A thin film NTC thermistor having a thin film resistive element of a sputtered mixture of metal oxide film, the thin film resistant element having a negative temperature coefficient is disclosed. Another aspect of the present invention includes a product line of negative temperature coefficient thermistors having the same physical size, but varying value of resistances when at the same temperature. Another aspect of the invention includes a method of manufacturing a thin film negative temperature coefficient thermistor using thin film techniques.~~

A method for manufacturing a thin film negative temperature coefficient thermistor is disclosed. The method includes selecting a physical size of the thermistor, selecting a negative temperature coefficient of resistance versus temperature curve, selecting a mixture of metal film materials to provide the negative temperature coefficient of resistance curve while maintaining the physical size, and depositing the mixture of metal film materials on a substrate.

In The Claims

Please cancel claims 1-7.

Please amend claim 8 as follows:

8. (Twice Amended)

A method of manufacturing a thin film negative temperature coefficient thermistor comprising:
selecting a physical size of the thermistor;
selecting a negative temperature coefficient of resistance versus temperature curve;
selecting a mixture of metal film materials to provide a the negative temperature coefficient of resistance curve while maintaining the physical size; and
depositing the mixture of metal film materials on a substrate.

Kindly enter new claim 14 as follows:

14. A method of manufacturing a plurality of negative temperature coefficient thermistors, comprising:
selecting a physical size for the plurality of negative temperature coefficient thermistors;
selecting a first negative temperature coefficient of resistance versus temperature curve
associated with a first type of negative temperature coefficient thermistor;
selecting a first mixture of metal film materials to provide the first negative temperature
coefficient of resistance versus temperature curve while maintaining the physical size;
depositing the first mixture of metal film materials on a first substrate;
selecting a second negative temperature coefficient of resistance versus temperature curve
associated with a second type of negative temperature coefficient thermistor;
selecting a second mixture of metal film materials to provide the second negative temperature
coefficient of resistance versus temperature curve while maintaining the physical size;
and
depositing the second mixture of metal film materials on the second substrate.